A1 end

the e- and o-rays in a parallel manner. These parallel beams are then focused into optical fiber 120 by second lens 118. However, light traveling in a reverse direction (from right to left) will have its e- and o-rays refracted in a different manner by the birefringent plates, causing the rays not to be focused into optical fiber 102 by lens 104.

In the claims:

Please amend the claims as follows:

A2

1. (Amended) An optical isolator core comprising:

A first polarizer having a wedge shape and configured to receive incident light traveling along a path and refract the incident light into o-rays and e-rays;

a rotator disposed along the path and configured to rotate the polarization planes of the o-rays and e-rays;

a second polarizer having a wedge shape and disposed along the path and having an optic axis approximately 45° apart from an optical axis of the first polarizer; and

a correction element of birefringent material, disposed along the path, having a length and an optic axis angle, wherein the length and the correction element optic axis angle are chosen to compensate for differential group delay and walk-off introduced by the first and the second polarizers.

A3

5. (Amended) The optical isolator of claim 1, wherein a distance traveled by said o-rays and the e-rays through said correction element is equal to the length of the correction element multiplied by the tangent of the angle β.

9. (Amended) An optical isolator adapted for receiving light transmitted through the isolator in a forward direction comprising:

a first polarizer having a wedge shape, disposed along a path, configured to separate light incident in the forward direction into at least one o-ray and at least one e-ray;

a polarization rotator disposed along the path;

a second polarizer having a wedge shape and disposed along the path; and

a correction element, disposed along the path, having a crystal optic axis which lies in a plane defined by the at least one e-ray and the at least one o-ray.

A4

B

18. (Amended) The optical isolator of claim 17 wherein the at least one o-ray and the at least one e-ray exit the second polarizer separated by a walk-off distance which is approximately equal to the length L of the correction element multiplied by the tangent of angle β.

A5

B

22. (Amended) An optical isolator adapted for receiving light transmitted through the isolator in a forward direction comprising:

a first polarizer, having a wedge shape and disposed along a path, configured to separate light incident in the forward direction into at least one o-ray and at least one e-ray;

a polarization rotator disposed along the path;

a second polarizer, having a wedge shape and disposed along the path, configured to refract the at least one o-ray and at least one e-ray such that they exit said second polarizer in substantially parallel light paths separated by a walk-off distance; and

a correction element, disposed along the path, having a length and a crystal optic axis which lies in a plane defined by the at least one o-ray and at least one e-ray, and wherein at least one of the at least one o-ray and at least one e-ray exiting the second polarizer are refracted by the correction element such that their respective light paths intersect at an angle β.

A4

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A7

25. (Amended) The optical isolator of claim 22 wherein the first polarizer has a crystal optic axis angle of approximately +/-45° relative to a vertical edge of the first polarizer.

26. (Amended) The optical isolator of claim 22 wherein the second polarizer has a crystal optic axis angle of approximately 0° or 90° relative to a vertical edge of the second polarizer.

A8

35. (Amended) A method for receiving light passing through an optical isolator in a forward direction through the isolator comprising:

separating the light traveling in a forward direction into at least one o-ray and at least one e-ray;

rotating the polarization of the at least one o-ray and the at least one e-ray;

refracting the at least one o-ray and the at least one e-ray such that they are in substantially parallel paths; and

passing the at least one o-ray and the at least one e-ray through a correction element having an optic axis in a plane defined by the substantially parallel paths_and a length chosen to compensate for differential group delay and walk-off introduced by the separating and the refracting.

A9

37. (Amended) The method of claim 35 wherein said correction element is configured to substantially eliminate the first order polarization mode dispersion.

41. (Amended) An optical isolator comprising:

means for separating light traveling in a forward direction disposed along a path into at least one o-ray and at least one e-ray;

means for rotating the polarization of the at least one o-ray and the at least one e-ray;

A10

means for refracting the at least one o-ray and the at least one e-ray, disposed along the path, such that they are in substantially parallel paths; and

means for passing the at least one o-ray and the at least one e-ray, disposed along the path, through a correction element having an optic axis in a plane defined by the substantially parallel paths and a length chosen to compensate for differential group delay and walk-off introduced by the separating and the refracting.

A11

43. (Amended) The method of claim 41, wherein said correction element is configured to substantially eliminate the first order polarization mode dispersion.

Please add claims 47 and 48 as follows:

47. (New) The method of claim 37 wherein the first order polarization mode dispersion is a differential group delay.

A12

48. (New) The method of claim 43 wherein the first order polarization mode dispersion is a differential group delay.